

Title (en)

METHOD OF PREPARING THIN FILM COMPOSITE MEMBRANES BY SUSPENSION DEPOSITION, AND USE OF SUCH MEMBRANES

Publication

**EP 0312377 A3 19900131 (EN)**

Application

**EP 88309634 A 19881014**

Priority

US 10881987 A 19871014

Abstract (en)

[origin: EP0312377A2] Thin film membranes of polyurea, polyurea-polyurethane alloy, polyurea-polyurea/urethane alloy or polyurea/urethane are prepared by deposition of a thin film of polyurea/urethane on a thick permeable support layer by the technique of preparing a suspension of the polyurea/urethane in a solvent which does not dissolve the thick permeable support layer and permitting the solvent to evaporate and/or permeate through the thick-permeable layer. The resulting composite membranes are useful for the selective separation of aromatic compounds from mixtures of aromatic and non-aromatic compounds.

IPC 1-7

**B01D 13/04**

IPC 8 full level

**B01D 61/36** (2006.01); **B01D 67/00** (2006.01); **B01D 69/12** (2006.01); **B01D 71/54** (2006.01); **B01J 20/26** (2006.01); **B05D 5/00** (2006.01); **B29C 41/16** (2006.01); **C07B 63/00** (2006.01); **C07C 1/00** (2006.01); **C07C 7/144** (2006.01); **C07C 11/00** (2006.01); **C07C 15/00** (2006.01); **C07C 67/00** (2006.01); **C08G 18/10** (2006.01); **C10G 31/11** (2006.01)

CPC (source: EP KR US)

**B01D 61/246** (2013.01 - KR); **B01D 61/362** (2013.01 - EP KR US); **B01D 63/02** (2013.01 - EP US); **B01D 63/021** (2013.01 - EP KR); **B01D 67/0004** (2013.01 - EP KR); **B01D 67/0048** (2013.01 - EP KR US); **B01D 69/08** (2013.01 - EP KR US); **B01D 69/107** (2022.08 - KR); **B01D 69/12** (2013.01 - EP US); **B01D 69/1213** (2022.08 - KR); **B01D 69/125** (2013.01 - EP US); **B01D 71/54** (2013.01 - EP KR US); **C08G 18/10** (2013.01 - EP KR US); **C08G 18/3243** (2013.01 - KR); **C10G 31/11** (2013.01 - EP KR US); **B01D 2323/12** (2013.01 - EP KR US); **Y10S 264/18** (2013.01 - EP KR US)

C-Set (source: EP US)

**C08G 18/10 + C08G 18/3243**

Citation (search report)

- [AD] US 4115465 A 19780919 - ELFERT KLAUS, et al
- [A] US 3936409 A 19760203 - SCHROEDER HERBERT M, et al
- [A] US 4009307 A 19770222 - ERIKSON J ALDEN, et al
- [A] US 3456037 A 19690715 - HOESCHELE GUENTHER KURT
- [A] US 3943158 A 19760309 - DIETRICH WERNER, et al
- [A] CHEMICAL ABSTRACTS, vol. 84, no. 24, 14 June 1976, page 318, column 1, abstract no. 169469e, Columbus, Ohio, USA; I. KABASSO et al.: "Trace organic contaminants in drinking water. Evaluation of semipermeable membranes and osmotic pumping to achieve concentration"; & Pepr.Pap. Natl. Meet., Div. Environ. Chem. Am. Chem. Soc. 1974, vol. 14, no. 1, pages 204-210
- [AP] PATENT ABSTRACTS OF JAPAN, vol. 12, no. 40 (C-474)(2887), 5 February 1988; & JP-A-62 191 006 (TORAY IND. INC.) 21.08.1987
- [A] PATENT ABSTRACTS OF JAPAN, vol. 10, no. 94 (C-338)(2151), 11 April 1986; & JP-A-60 225 622 (KOGYO GIJUTSUIN) 09.11.1985
- [A] PATENT ABSTRACTS OF JAPAN, vol. 8, no. 156 (C-234)(1593), 19 July 1984; & JP-A-59 059 222 (TEIJIN K.K.) 05.04.1984

Cited by

EP0523295A1; EP0760252A1; EP2111959A2

Designated contracting state (EPC)

BE DE ES FR GB IT NL

DOCDB simple family (publication)

**EP 0312377 A2 19890419; EP 0312377 A3 19900131; EP 0312377 B1 19930331;** BR 8805318 A 19890530; DE 3879857 D1 19930506; DE 3879857 T2 19930805; ES 2039638 T3 19931001; JP H022852 A 19900108; KR 890006714 A 19890615; MY 104340 A 19940331; US 4861628 A 19890829

DOCDB simple family (application)

**EP 88309634 A 19881014;** BR 8805318 A 19881014; DE 3879857 T 19881014; ES 88309634 T 19881014; JP 25923988 A 19881014; KR 880013410 A 19881014; MY PI19881153 A 19881014; US 10881987 A 19871014